



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,816	11/21/2003	Mark C. Buckley	CKS5042.28A1	3320
8156	7590	06/30/2005	EXAMINER	
JOHN P. O'BANION O'BANION & RITCHEY LLP 400 CAPITOL MALL SUITE 1550 SACRAMENTO, CA 95814			LA, ANH V	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,816

Applicant(s)

BUCKLEY ET AL

Examiner

Anh V. La

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7, 9-20, 23-33, 35, 37, 38, 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugimoto.

Regarding claim 1, Sugimoto discloses an apparatus for detecting intrusions within a protected region comprising an infrared sensor assembly having at least four infrared sensing elements 15 a-d, 12, 11, means 2, 21, 22, 23, for focusing infrared energy from a protected region, and means for generating an intrusion signals (column 7, lines 50-65).

Regarding claim 2, Sugimoto discloses altering the energy direction by refraction, reflection or diffraction.

Regarding claim 3, Sugimoto discloses an array of optical elements (figures 1, 11).

Regarding claim 4, Sugimoto discloses a single optical assembly (fig. 6).

Regarding claim 5, Sugimoto discloses a lens assembly 2.

Regarding claim 7, Sugimoto discloses non-overlapping upper and lower detection tiers (fig. 1, 11, 27).

Regarding claim 9, Sugimoto discloses a vertically-oriented pair of sensing elements (fig. 5).

Art Unit: 2636

Regarding claim 10, Sugimoto discloses a threshold circuit (col. 7, lines 50-65).

Regarding claim 11, Sugimoto discloses a selection of a pet-immune mode or a non-pet-immune mode (col. 7, lines 50-65).

Regarding claim 12, Sugimoto discloses an upper and lower pair of infrared sensing elements (col. 7, lines 50-67).

Regarding claim 13, Sugimoto discloses a first infrared sensor channel and a second infrared sensor channel in opposing polarity (fig. 27).

Regarding claim 14, Sugimoto discloses two dual-sensing element device packages (fig. 27).

Regarding claim 15, Sugimoto discloses a single quad-sensing element device package (fig. 5).

Regarding claim 16, Sugimoto discloses the sensing element being positioned within one half inch of one another (fig. 5, 27).

Regarding claim 17, Sugimoto discloses infrared sensors (col. 3, lines 60-65).

Regarding claim 18, Sugimoto discloses pyroelectric infrared sensors (col. 3, lines 60-65).

Regarding claim 19, Sugimoto discloses the sensing element being configured in upper and lower horizontally-oriented pairs in opposing polarity and with a common-mode infrared energy (fig. 27).

Regarding claim 20, Sugimoto discloses an apparatus for detecting intrusion comprising an infrared sensor assembly having at least four infrared sensing elements 15 a-d, 12, 11, lens assembly 2, 21, 22, 23 and a threshold circuit (col. 7, lines 50-65).

Art Unit: 2636

Regarding claim 23, Sugimoto discloses rejecting common mode infrared signals simultaneously received across horizontally-oriented sensing elements (col. 7, lines 50-65).

Regarding claim 24, Sugimoto discloses the horizontally adjacent sensing element being connected in opposing polarity (fig. 11, 27).

Regarding claim 25, Sugimoto discloses pyroelectric infrared sensors (col. 3, lines 60-65).

Regarding claim 26, Sugimoto discloses a mode selector (col. 7, lines 50-67).

Regarding claim 27, Sugimoto discloses a first infrared sensor channel and a second infrared sensor channel in opposing polarity (fig. 27).

Regarding claim 28, Sugimoto discloses the first channel positioned over the second channel with alternating polarities in the vertical direction (fig. 1).

Regarding claim 29, Sugimoto discloses two dual-sensing element device packages (fig. 27).

Regarding claim 30, Sugimoto discloses a single quad-sensing element device package (fig. 5).

Regarding claim 31, Sugimoto discloses pyroelectric infrared sensors (col. 3, lines 60-65).

Regarding claim 32, Sugimoto discloses multiple lens elements 2a, 2b.

Regarding claim 33, Sugimoto discloses two or more horizontally oriented tiers 2a, 2b.

Regarding claim 35, Sugimoto discloses adjacent horizontal lenses (fig. 6).

Regarding claim 37, Sugimoto discloses a pet-immune mode or a non-pet-immune mode (col. 7, lines 50-65).

Regarding claim 38, Sugimoto discloses an apparatus for detecting intrusions within a protected region comprising an infrared sensor assembly 3, 4, having at least four infrared sensing elements 15 a-d, 12, 11, lens assembly 2, 21, 22, 23, a threshold circuit, and a mote selector input (col. 7, lines 50-67).

Regarding claim 40, Sugimoto discloses a method of discriminating human intrusion from animal intrusion within an infrared detection area comprising registering infrared intensity within the detection area as received from at least two stacked non-overlapping detection tiers each having a plurality of non-overlapping detection zones, rejecting common infrared signals simultaneously occurring on horizontally adjacent detection zones within a given tier, and generating an intrusion signal indicative of the presence of human intruders in response to registering sufficient simultaneous infrared activity on vertically adjacent detection zones in at least two stacked detection tiers (fig. 11, 27).

Regarding claim 41, Sugimoto discloses indicating intruders having heat signature shorter than a standing human (col. 7, lines 50-60).

Regarding claim 42, Sugimoto discloses a mode selector (col. 7, lines 50-60).

Regarding claim 43, Sugimoto discloses pyroelectric infrared sensors (col. 3, lines 60-65).

Regarding claim 44, Sugimoto discloses vertical separation (fig. 1).

Art Unit: 2636

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto in view of Miyake.

Regarding claim 6, Sugimoto discloses all claimed subject matter as set forth above in the rejection of claim 2, but does not disclose a mirror assembly. Miyake teaches the use of a mirror assembly (col. 1, lines 15-25). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a mirror assembly to the apparatus of Sugimoto as taught by Miyake for the purpose of focusing infrared energy.

5. Claims 8, 21, 22, 39, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto in view of Reiss.

Regarding claims 8, 21, 39, and 45, Sugimoto discloses all claimed subject matter as set forth above in the rejection of claim 7, but does not disclose a longer focal length upper tier and a shorter focal length lower tier. Reiss teaches the use of a longer focal length upper tier and a shorter focal length lower tier 16, 24. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a longer focal length upper tier and a shorter focal length lower tier to the apparatus of Sugimoto as taught by Reiss for the purpose of focusing infrared energy.

Regarding claim 22, Sugimoto discloses a pet-immune mode and a non-pet-immune mode (col. 7, lines 50-65).

6. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto in view of Sheffer.

Regarding claim 34, Sugimoto discloses all claimed subject matter as set forth above in the rejection of claim 32, but does not disclose four horizontally oriented tiers of lenses. Sheffer teaches the use of four horizontally oriented tiers of lenses (fig. 3). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include four horizontally oriented tiers of lenses to the apparatus of Sugimoto as taught by Sheffer for the purpose of focusing infrared energy.

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto in view of Katz.

Regarding claim 36, Sugimoto discloses all claimed subject matter as set forth above in the rejection of claim 20, but does not disclose a microprocessor. Katz teaches the use of a microprocessor (col. 2, lines 33-37). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a microprocessor to the apparatus of Sugimoto as taught by Katz for the purpose of receiving signals from the sensors. .

Art Unit: 2636

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh V. La whose telephone number is (571) 272-2970. The examiner can normally be reached on Mon-Fri from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ANH V. LA
PRIMARY EXAMINER

Anh V La
Primary Examiner
Art Unit 2636

AI
May 02, 2005